

## Math 126 End of Week 6 Newsletter

### UPCOMING SCHEDULE:

Friday: Section 15.2 (Doubles Integrals over general regions)  
Monday: Section 10.3/15.3 (Polar Coordinates and circular regions)  
Tuesday: Mini-Lecture and Homework Q&A  
Wednesday: Section 15.3 (Double Integrals over polar regions)  
Thursday: Homework Q&A and Exam Review  
Next Friday: Section 15.4 (Double Integral Applications)

**HOMEWORK:** Closing Tuesday: 15.2                      Closing Thursday: 10.3                      Closing Friday: 15.3

**POSTINGS:** The website is here: <https://sites.math.washington.edu/~aloveles/Math126Spring2019/index.html>

There are several new postings:

#### 1. 15.2 Practice Describing Regions:

<https://sites.math.washington.edu/~aloveles/Math126Spring2019/15-2%20Practice.pdf>

**Sol'ns:** <https://sites.math.washington.edu/~aloveles/Math126Spring2019/15-2%20Practice%20Solns.pdf>

#### 2. 15.2 Practice Describing Regions and Setting Up Double Integrals:

<https://sites.math.washington.edu/~aloveles/Math126Spring2019/Even%20more%2015-2%20Practice%20.pdf>

**Sol'ns:** <https://sites.math.washington.edu/~aloveles/Math126Spring2019/Even%20more%2015-2%20Practice%20-%20Solutions.pdf>

#### 3. 15.2 and 15.3 Overview (includes practice problems on switching order of integration, solutions included):

<https://sites.math.washington.edu/~aloveles/Math126Spring2019/15-2and15-3Review.pdf>

#### 4. 10.3 Overview with Examples (polar coordinates)

<https://sites.math.washington.edu/~aloveles/Math126Spring2019/Polar%20Coordinates%20Overview.pdf>

#### 5. Trig review (for anyone that doesn't remember their trig)

<https://sites.math.washington.edu/~aloveles/Math126Spring2019/Trig%20Facts.pdf>

### OLD EXAMS:

*For practice with 15.1:*

Problem 1(a) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14perkinsExII.pdf>

Problem 3(a) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>

*For practice with 15.2:*

Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14lovelessExII.pdf>

Problem 1(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14perkinsExII.pdf>

Problem 4(a) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14taggartExII.pdf>

Problem 2(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut13lovelessExII.pdf>

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr13lovelessExII.pdf>

Problem 3(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr10lovelessExII.pdf>

*For practice with 10.3 you might try:*

Problem 4(a) from: <http://www.math.washington.edu/~aloveles/Math126Spring2019/sp11m126e1.pdf>

Problem 3(b) from: <http://www.math.washington.edu/~aloveles/Math126Spring2019/sp10m126e1.pdf>

Problem 4 from: <http://www.math.washington.edu/~aloveles/Math126Spring2019/Taggart09e1.pdf>

*For practice with 15.3:*

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14lovelessExII.pdf>

Problem 4(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14taggartExII.pdf>

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut13lovelessExII.pdf>

Problem 4(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>

Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr10lovelessExII.pdf>

I hope some of this helps.

- Dr. Andy Loveless ..... see the next page for links to integration review...

**SUPPLEMENTAL POSTINGS ON INTEGRATION:** You now need to remember how to integrate. You are expected to know all integration techniques from Math 125. If you have forgotten integration, then see my website for even more review of integration. Here are a few specific links you might find useful.

1. **Integrals you can quote in one step:**

<https://sites.math.washington.edu/~aloveles/Math126Spring2019/CalculusFactSheet2.pdf>

2. **Very Basic Integrals I expect you to be able to do** quickly (only require simplification or substitution)

<https://sites.math.washington.edu/~aloveles/Math126Spring2018/BasicIntegralPage.pdf>

**Solutions:** <https://sites.math.washington.edu/~aloveles/Math126Spring2018/BasicIntegralPageSolutions.pdf>

3. **Examples of Trig Integral Techniques** (you'll need this a lot in section 15.3):

<https://sites.math.washington.edu/~aloveles/Math126Spring2018/IntegratingPowersOfTrig.pdf>

4. Here is my flowchart on how to do all integration problems (from Math 125):

<https://sites.math.washington.edu/~aloveles/Math125Winter2018/Integration%20Methods%20Flowchart.pdf>

5. Here is my summary of all integration methods (from Math 125):

<https://sites.math.washington.edu/~aloveles/Math125Winter2018/IntegrationTechniques.pdf>

6. If you go to my Math 125 website, you can see a huge number of practice sheets with problems and full solutions:

<https://sites.math.washington.edu/~aloveles/Math125Winter2018/index.html>